



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,789	09/28/2001	Mark S. Edwards	AD6813 US NA	3445
23906	7590	10/02/2003	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			JUSKA, CHERYL ANN	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 10/02/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/965,789	EDWARDS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cheryl Juska	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 July 2003.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) 11-49, 51-60 and 73-75 is/are withdrawn from consideration.
- 5) Claim(s) 76 and 77 is/are allowed.
- 6) Claim(s) 1-10, 50, 61-69, 71 and 72 is/are rejected.
- 7) Claim(s) 70 and 78 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                             | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8, 10</u> . | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1771

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-10, 50, 61-72, and 76-78, in Paper No. 12 filed on July 16, 2003, is noted. Claims 11-49, 51-60, and 73-75 are hereby withdrawn as non-elected.

### ***Double Patenting***

2. Claim 69 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 66. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Objections***

3. Article claim 78 is objected to for being dependent upon method claim 75. For the purposes of examination, claim 78 is taken as being dependent upon independent article claim 76. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1771

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 77 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 77 is indefinite for the lack of antecedent basis of the phrase "the second row of bristles." Claim 76, from which claim 77 depends, does not recite "bristles," but rather "elongated members."

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, 9, 61-66, 69, 71, and 72 are rejected under 35 USC 102(b) as anticipated by US 5,547,732 issued to Edwards et al.

Edwards discloses an elongated pile article having a support strand and two rows of a plurality of yarn bundles attached thereto (abstract). The support strand (i.e., base string) is of a thermoplastic polymer and may be a variety of cross-sectional shapes, including square, rectangular, elliptical, oblong, round, triangular, multi-lobal, or flat ribbon-like (col. 15, lines 3-15). Said thermoplastic polymer may be nylon (claim 24, col. 19). The yarn bundles may be a multifilament yarn of a thermoplastic polymer that is the same as the support strand polymer

Art Unit: 1771

(col. 14, lines 46-61). Figures 2B shows the yarns are attached to the support strand at an angle ranging from 45-90 degrees (col. 5, lines 9-26). The elongated pile article or tuftstring is suited for making carpet (col. 13, lines 7-10). The embodiment of Figure 14B shows a cross-section of a first support strand with a row of elongated members having a proximal end connected to said first strand and a second support strand having a second row of elongated members connected to an opposite side of said second strand, wherein the first and second rows of elongated members are connected to each other between said first and second support strands (i.e., loop). Thus, claims 1-6, 9, 61-66, 69, 71, and 72 are anticipated by Edwards.

8. Claims 1-6, 8, and 10 are rejected under 35 USC 102(b) as being anticipated by US 3,216,038 issued to Gould et al.

Gould teaches broom bristles made by securing monofilament bristles in the shape of a U or V to a core strand (col. 1, lines 50-64). The bristles may be made of nylon or polypropylene. Figures 2, 3, and 7 show the bristles extending from the core at an angle, including an angle of about 90 degrees. Said figures also show the core has a round cross-sectional shape. Thus, claims 1-6, 8, and 10 are rejected as being anticipated by Gould.

#### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1771

10. Claims 7 and 67 are rejected under 35 USC 103(a) as being unpatentable over the cited Edwards reference.

Edwards lacks a teaching to the support strand and the elongated member being of different polymeric materials. Although Edwards teaches the strand and members are preferably of the same material, it would have been obvious to one skilled in the art to employ a different material as long as the requirement that the two polymers are capable of being bonded together without the use of an adhesive (i.e., fusion). It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. In re Leshin, 125 USPQ 416. Thus, claims 7 and 67 are rejected as being obvious over the cited Edwards reference.

11. Claims 8, 10, 50, and 68 are rejected under 35 USC 103(a) as being unpatentable over the cited Edwards reference in view of US 3,216,038 issued to Gould et al.

Although Edwards does not explicitly teach the use of monofilaments or brush bristles as the elongated members, said elongated bristle members are well known in the art. For example, as noted above, Gould teaches an elongated pile element comprised of bristles. Hence, it would have been obvious to one skilled in the art to substitute monofilament bristles for the multifilament yarns of Edwards. Motivation to do so would be to expand the number of applications of the inventive tuftstring. For example, track mats or shoe scraping floor mats, brooms, and brushes of all sorts can be made with monofilaments rather than multifilaments. Therefore, claims 8, 10, 50, and 68 are rejected as being obvious over the cited prior art.

***Allowable Subject Matter***

12. Claim 70 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. Claims 76 and 77 are allowed.
14. It would not have been obvious to one skilled in the art to modify the cited Edwards reference so that the first row of elongated members differs from the second row of elongated members in size, shape, color, or filament structure. Specifically, since the process of making Edwards's tuftstring involves wrapping the yarn around the bottom of the support strand so that the first and second rows of elongated members are connected in the shape of a U, modifying the elongated members to have different properties in the different rows would be contrary to the Edwards invention. Thus, claims 70 and 76-78 contain allowable subject matter.

***Information Disclosure Statement***

15. The information disclosure statements filed on April 4, 2002 and May 8, 2003, fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The items which have a line drawn through them have not been considered due to the examiner being unable to obtain a copy thereof.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the

Art Unit: 1771

Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

CHERYL R. JUSKA  
PRIMARY EXAMINER

cj

September 30, 2003